

Geopolitics

BBVA Research Big Data Geopolitics Monitor

Big Data Unit 24 October 2023

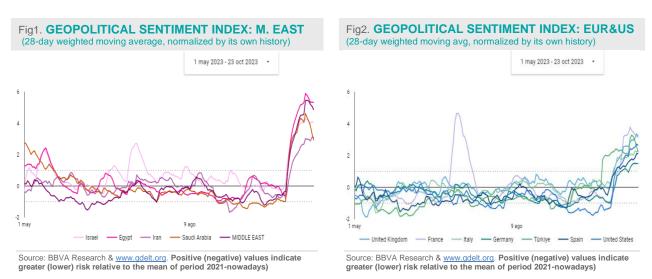
A "Three Phases War" and increasing Diplomacy for Containment

The conflict between Israel and Hamas intensifies while it is still in "the first of the three expected phases of the war". According to Defense Minister of Israel Yoav Gallant last Friday, the War will consist of three phases (link): The actual one, (1) with airstrikes focusing on sites that could potentially endanger Israel forces, followed by (2) ground maneuver with the purpose of destroying operatives and damaging infrastructure to defeat and destroy Hamas and (3) the last phase aims to create a new "security regime" in Gaza. Meanwhile, the International Diplomacy increased efforts to contain escalation and limited the collateral damage of the conflict. The US administration would be advising Israel to delay the Gaza invasion to allow time for hostage negotiations with Hamas and prepare for attacks on US interests in the region and to enhance the delivery of AID to Palestinians (link). Representatives of the EU flight to Washinghton to maintain talks with the US administration and flight later to El Cairo to dialogue with Arab countries. The EU countries representatives also maintained conversations with the Israeli Prime minister and some of them (Macron and Rutte visited Israel this week). The Iranians remain more cautious, helped by the downplay of Iran's role in Hamas's attack by the US and Israel, and analyzing the balance of risks of the conflict to its external influence in the area, along with the risks of internal stability (i.e social unrest) from an escalation of the conflict (link).

The BBVA Geopolitical Monitor: High Geopolitical Risks but still neutral Economic sentiment

The third week of the Conflict did not come up with Big Changes in our indexes. The BBVA Research Big Data Geopolitics Sentiment indexes¹ reflects a similar picture to the last week with some minor changes:

- The levels of Geopolitical and Conflict_sentiment remains at "Extreme Risk" in the Middle East and most of the Western Countries (Fig1 & Fig2).
- The Political Indexes need to be monitored closely as they remain at very high levels in the Middle East & some spots of risk in Western Countries (UK, France, Türkiye & USA) (Fig2 & Fig3).
- The Protest Indexes remain at similar levels this week. Somehow more contained but with some signals of risk in the M. East (S. Arabia & Egypt) and in the West (UK and now Germany & Türkiye).
- On the positive side, the Economic Political Uncertainty index remains in the neutral area after three
 weeks of conflict.



¹ BBVA Research Big Data geopolitics indexes are built from the media news articles using artificial intelligence techniques (NLP techniques including Sentiment Analysis) to display real-time signals of geopolitical tensions and risks, sourced from a global news Big Data set (GDELT). See the annex for further information.



Fig3. BBVA RESEARCH GEOPOLITICS MONITOR "SIGNAL" CHANGES AFTER HAMAS-ISRAEL CONFLICT (Signals in Geopolitical Risk, Political Tensions, Economic Policy Uncertainties, Protest and Conflict according to Standard Dev,)

BBVA Research Geopolitics Monitor main "Signal" changes after the Hamas-Israel Conflict

Summary of Signals <u>Before Hamas-Israel Conflict</u> (October 16) Ec. Policy Uncertainty Spain Turkiye Egypt Israel Iran Saudi Arabia Mexico Mexico Argentina Brazil Colombia Chile Peru Uruguay

Summary of Signals After Hamas-Israel Conflict (October 23rd) USA China Taiwan Russia

Source: BBVA Research and www.gdelt.org

Fig4. POLITICAL SENTIMENT INDEX: M.EAST (28-day weighted moving avg, normalized by its own history)



Source: BBVA Research & www.gdelt.org.

Fig5.POLITICAL SENTIMENT INDEX: EUR&US





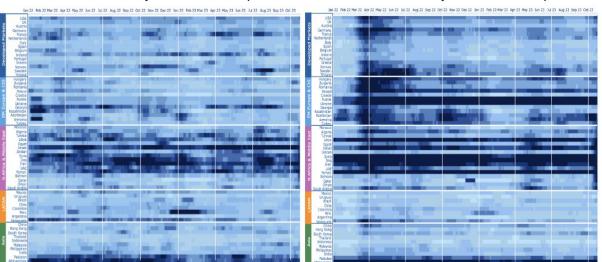
Source: BBVA Research & www.gdelt.org.

Fig6. BBVA RESEARCH PROTEST AND CONFLICT HEAT MAPS

(Evolution of Protest and Conflict over time by regions)

Protest Intensity Index Heatmap

Conflict Intensity Index Heatmap



Source: BBVA Research and www.gdelt.org



Methodological annex: indicators' construction

We have developed a daily tracker with weekly updates to monitor protest and conflict indicators for every country in the world from 2019 to present day. To construct this, we use a rich 'big database' of international events (GDELT), created by Leetaru and Schrodt (2013). GDELT is an open-source database which extracts and parses digital news monitoring world events covered by news media from nearly every corner of the world, whether broadcast, printed or published on the web, in over 100 languages, every moment of every day, updated every 15 minutes. Thus, it contains a comprehensive and high resolution catalog of geo-referenced events and themes.

Using different dictionaries, several thousands of taxonomies and themes are identified in the news pieces to classify the information. The algorithms used by GDELT also identify emotions, organizations, locations, news sources and events across the world as well as their average sentiment using Natural Language Processing (NLP) techniques and the lexicon approach.

The included indicators are:

- Geopolitical Risk: or sentiment (weighted by coverage) of the country's geopolitical risk perception.
- Political Tensions: or sentiment (weighted by coverage) of the country's political tensions.
- Economic Policy Uncertainty or sentiment (weighted by coverage) about the country's economic policy uncertainty, also disaggregated by media origin.
- Protests or coverage regarding social protests or unrest in the country.
- Conflict or coverage of armed conflicts, which go beyond verbal protests.
- Bilateral Tensions or the sentiment (weighted by coverage) between a specific pair of countries that appear together in the news article (plus NATO and EU).

The indicators track the evolution of tensions and are normalised by its own country history since 2019, thus they are all expressed in terms of standard deviations from their historical patterns. Indicators usually lie within the range [-1,1]. Therefore, when the values exceed one (the upper boundary of the range), this means escalating tensions. While it's possible to observe simultaneous tensions arising in multiple countries (for example, due to geopolitical events affecting several nations, as seen in some of our heatmaps), using these indicators for direct quantitative comparisons of risk levels between countries is not recommended.

We apply a weighted moving average of 28 days (to include four complete weeks with the same number of days of the weeks) to reduce noise of daily information and identify signals more clearly. The weights have been calculated using a discrete geometric distribution such that it puts more weight on recent data and less on past data (see Graph 1). Aggregating by weeks, the weight of the most recent week has a weight of 68%, the past week 22%, the previous 7% and the fourth 3%. The weight of the 28 days can be seen in the following image. In such a way, the indicators reflect what is happening in the last days.



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